

Side View Chip LEDs 0605<1.6 × 1.15 t=0.55mm> High Brightness Type

SML-A12 Series

Side View

Emitting Color	Green(Yellowish Green)	Yellow	Orange	Red
Material	AlGaInP on GaAs			
Package Size(mm)	1611(0605) 1.6×1.15(t=0.55)			
Part No.	SML-A12MT	SML-A12WT	SML-A12DT	SML-A12UT

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current I _{FP} * (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-A12MT	Green (Yellowish Green)	65	25	100	5	-30 to +85	-40 to +85
SML-A12WT	Yellow					-30 to +85	-40 to +85
SML-A12DT	Orange	75	30			-40 to +85	-40 to +100
SML-A12UT	Red						

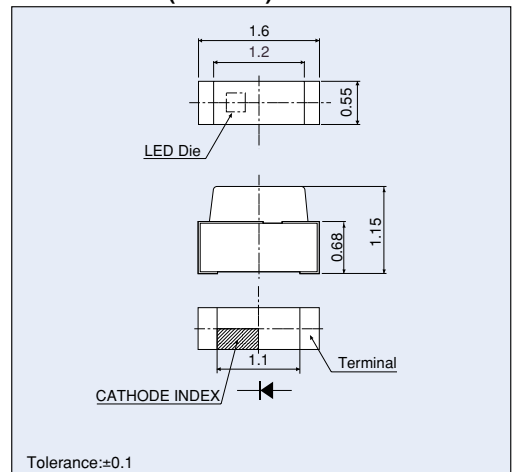
*:Duty ≤ 1/10, 1kHz.

Electrical Optical Characteristics (Ta=25°C)

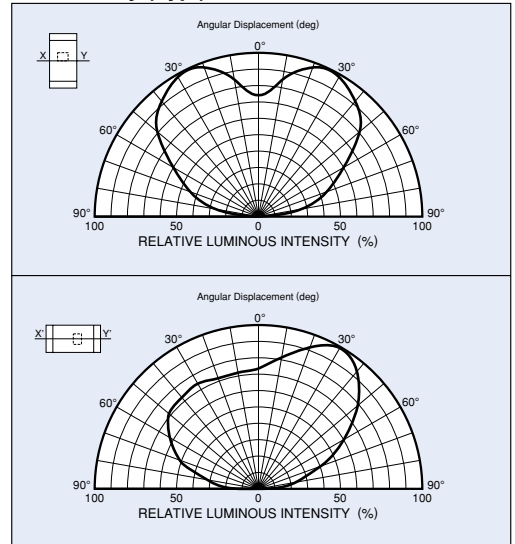
Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength		Brightness I _v			
		Typ. (V)	I _F * (mA)	Max. (μA)	V _R (V)	Peak λ _p Typ. (nm)	Half-wave Δλ Typ. (nm)	I _F * (mA)	Min. (mcd)	Typ. (mcd)	I _F * (mA)
SML-A12MT	Transparent	2.1	20	100	5	570	18	20	14	40	20
SML-A12WT		590		15		63					
SML-A12DT	Colorless	2.0	10			611	16		36	100	
SML-A12UT						630	18				

*Pulse width : 30ms

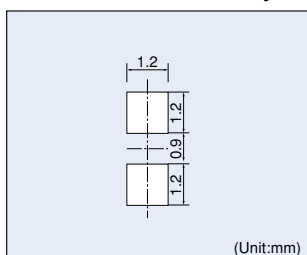
Dimensions (Unit:mm)



Directivity (Typ.)

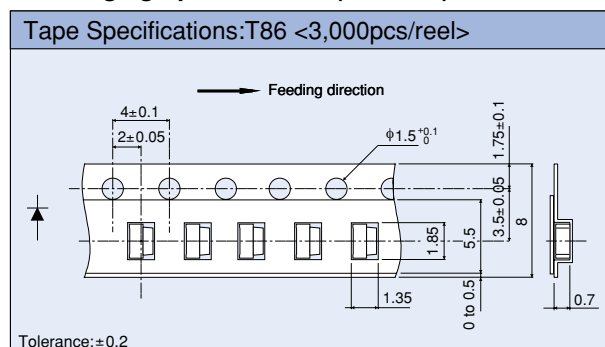


Recommended Pad Layout

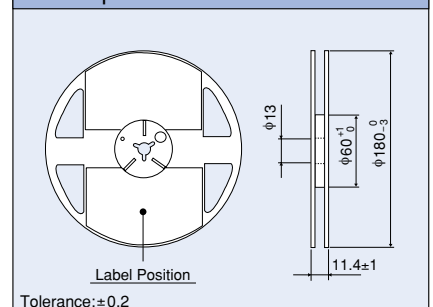


The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

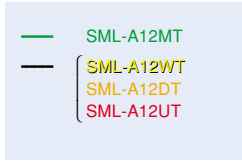
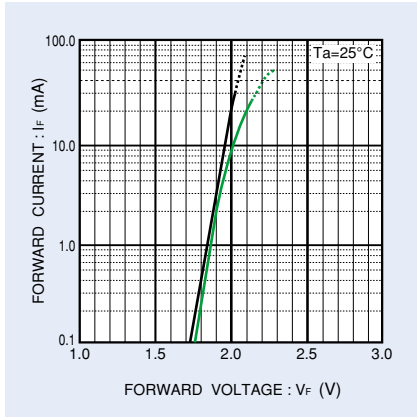


Reel Specifications

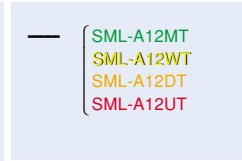
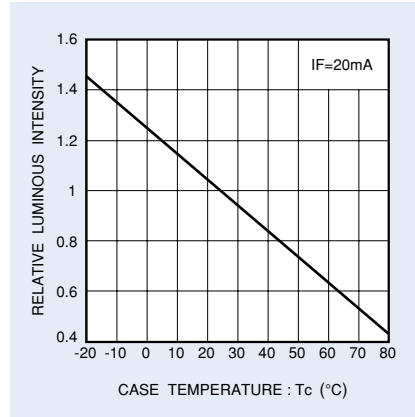


Electrical Characteristic Curves

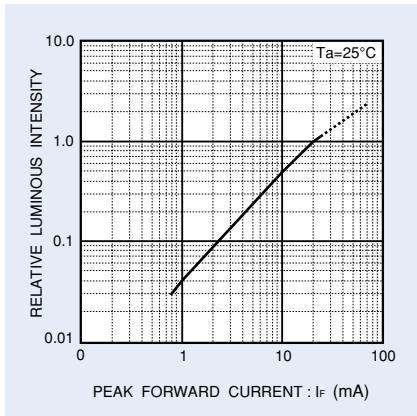
Forward Current - Forward Voltage



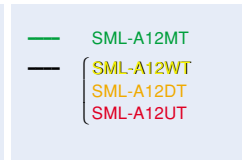
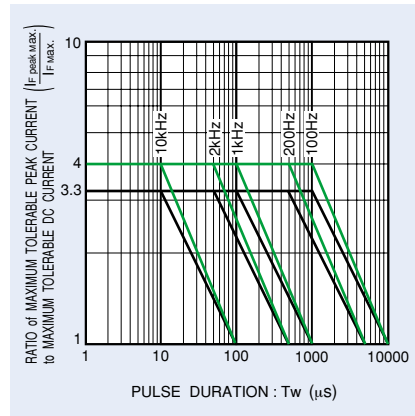
Relative Luminous Intensity - Case Temperature



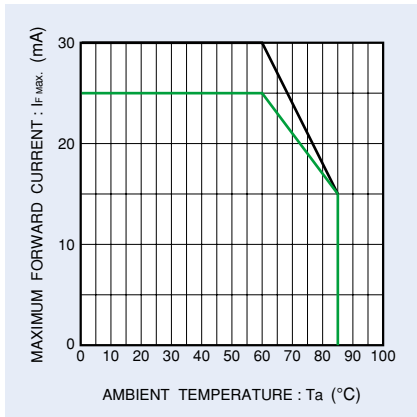
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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